P2 COMMITTEE ACTIVITIES AND TARGETS – Short Term (FY – 2005)

| | ACTIVITIES (PROJECT LEADER) | TARGET | UPDATE |
|-----|--|--|---|
| 2. | Implement AP/EPP at PBS (Lallier / Kocher / Sekura) | One training session / up on Website | AP/EPP information to be added to Lallier's environmental training. L. Sekura to provide Info before April 6, 2005. |
| 3. | Natural lawn care (Sekura) | Implement organic program | R. Kalynchuk and P. Kall have met and defined mowing- free areas. |
| 4. | Garnet Recycling (Kocher) | Complete installation, optimize performance & implement | Installation complete. D. White/P2 Team need a final report from Yod. |
| 5. | Garnet recycling tech transfer (Kocher) | Investigate business-wide applications | P. Kennedy will put a 15-minute video on the P2 website. Once the video is on the website, W. Kocher will contact Marshall to see if they are interested. Yod needs a new pass. Report to be presented at Ames meeting. |
| 6. | Life Cycle Assessment (Kocher / Sekura) | Determine and implement 2 application- specific tools | L. Sekura finishing up lawn care, light bulb, flywheel, LCA analysis. Sekura has started road salt LCA. LCA chapter 15 update complete, distribute for comments. |
| 7. | Develop a web-based P2/Recycling training module(Kenzig/Kocher/Sekura) | Make available | M. Kenzig and S. Jacobson are working on the second draft of training module which is nearly complete. GOLARN program may be used. |
| 8. | AP/EPP web site (Kocher/Sekura) | Develop analytical tool | Utsav has competed first version of computer tool. Public version eventually to be on web. |
| 9. | Create SAGE-like program to recommend P2 alternatives (Kocher) | Make search tool available on net for GRC | Funding for students needed. |
| 10. | Market AP/EPP site NASA-wide (Kocher / Kenzig / Myers) | Implement AP/EPP on GoLearn.com or similar | Walt will work with CSU, other centers, and local environmental groups as a test and to spread awareness of the project. No response toproposal submitted to EPA Region V (Chicago). Response expected in April 2005. Kenzig to work with card holders. |
| 11. | Determine strategic plan to include AP/EPP language in contracts (Kenzig / Myers) | Create clause language and incorporate into five contracts | Need Michelle's input. (Cafeteria SOW sustainability language should be used in cafeteria contract, partially fulfilling 1 of 5 contract targets.) |
| 12. | Replace Stoddard Solvent as degreaser in Space Environment Chamber at PBS (Sekura / Lallier) | Replace with EPP degreaser | Project on hold. No news on tests |

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| | ACTIVITIES (PROJECT LEADER) | TARGET | UPDATE |
|-----|--|--|--|
| 13. | Study of low-strength mortar and flowable fill containing recycled material (Kocher) | Develop guidance document | Comments still needed. R. Palyo also needs the report to set up a meeting to discuss implementation. |
| 14. | Install sustainable cooling towers at SPF (Lallier) | Conduct feasibility study | CoF project canceled. R. Lallier met CoF project team. Vortex and Dolphin(non-chemical system to be used. |
| 15. | EPP Chapter (Kenzig / Kocher / Sekura) | Publish EPP chapter | W. Kocher to see that the EPP chapter is approved. Editing in progress. |
| 17. | Add 5 products to AP/EPP list (Sekura) | 5 EPP products posted on AP/EPP site | Working on light bulbs, paper, and several other product categories. Want to focus on AP-type (EPA/CPG-listed) products. Toilet paper added. Others to be added in late May. |
| 18. | Water conservation for cooling tower maintenance (Sekura / White) | Use rental portable unit to save water during shutdown | L. Sekura to continue working with L. Shroeder and A. Hugo to determine FD response to work order. FD now reviewing options. |
| 19. | Recycle Chapter (Kenzig) | Publish chapter | Draft to be distributed to Recycle Committee members. Due date for chapter: April 30, 2005 |
| 20. | AP Chapter (Kenzig) | Publish chapter | AP chapter being edited. Must be complete by April 30. |
| 21. | CFL pilot program (Sekura) | Complete pilot program | Sale#1: 117 bulbs delivered. Sale #2 in progress. |
| 22. | Replace precision wipes with 100% recycled-content paper towels | Employees order fewer wipes | Paper towels now listed in stock on web and educational piece also posted. |

Completed Short Term

| 1. | Reduction of chemicals at PBS | All 4 major facilities: | Muscolo and Quintin assisted PBOSG in conducting the |
|-----|---|--------------------------------------|---|
| | (Lallier / Muscolo) | a.) Assessed for excessive chemicals | annual chemical inventory and bar-coding procedure. |
| | | b.) Chemicals disposed or recycled | Report to come. |
| 16. | Spark plug / energy efficiency (Sekura) | Complete study | Testing completed. Efficiency did not improve as much |
| | | | as anticipated. |

P2 COMMITTEE ACTIVITIES AND TARGETS – Long Term (FY – 2005)

| | ACTIVITIES | FY- 05 TARGET | LONG TERM GOAL |
|-----|---|--|---|
| 1. | Real Time Monitoring pilot study at GRC – Lewis Field (Kocher) | Secure funding for a prototype unit | Funding still needed. Project may begin moving forward in the last half of CY 2005. |
| 2. | Replace large Iridite uses (Sekura) | Performance testing done | MIL spec includes chromate. This is a dead issue until GRC specs change or a new chemical developed. L. Sekura to contact KFC. |
| 3. | Life Cycle Assessment (Kocher / Sekura) | Develop basic model | Develop combined qualitative / quantitative tool. |
| 4. | Soil pile prairie – West & Cryogenic (Walker/Buttler/Sekura) | Plant prairie | Buttler (Pheasants Forever) seed at GRC. Roto tilling to take place in spring 2005. \$10-12K needed to till 3-31/2 acres. |
| 5. | Biodegradable cafeteria supplies (Sekura) | Implement pilot program | Education of users for napkins made of recycled material to begin soon. M. Betlejewski to order napkins. Outreach program on reduction of use of disposables. Advertised on Today @ Glenn. |
| 6. | Cafeteria GRC-wide composting (Kennedy / Kocher) | Implement pilot program | P. Kennedy to take weekly photos of dumpster contents. (Cafeteria averages 8-12 bags of garbage now.) Building 315 storage area will also be monitored. Checking on large-scale composting procedures/ equipment. Considering options re: use of compost. |
| 7. | New cafeteria set-up (Sekura) | Integrate sustainability concepts | Mark Betlejewski is on a team tasked with contracting out the cafeteria job. The SOW that went out for bid now includes pro-P2 language. Won't be implemented until May or June. Washables have replaced some disposables. |
| 8. | Convert EMO and other GRC vehicles to CNG/other alt. (Strawser) | All new/replacement vehicles capable of using alternative fuel | In May 2004, 14 vehicles were replaced with E85 models. Others will be added each year. It took 16 months to use up the first 8500 gallon delivery of E85. |
| 9. | Renewable energy at Lewis Field (Quach / F. Miller) | Produce some form of renewable energy at Lewis Field to feed back into grid, remove an area from grid, or use power for a project instead of grid. | Negotiations with power company in progress. Note that GRC gets a credit from work in a Building 5 test cell that puts power into the power grid |
| 10. | Renewable energy at PBS (F. Miller / Quach) | Same as #9 – at PBS. | F. Miller is in contact with PBS personnel. As many as 12 towers may be installed. |

P2 COMMITTEE ACTIVITIES AND TARGETS – Long Term (FY – 2005)

| | ACTIVITIES | FY- 05 TARGET | LONG TERM GOAL |
|-----|---|---|---|
| 11. | Assist in providing wind power from Lake Erie (F. Miller) | Assist in GEO project by receiving data at NASA antenna – Target achieved when wind monitoring study completed. | Ice must break, first |
| 12. | Initiate one NASA hydrogen power project (Sekura / Hoberecht / Prokopius) | Consensus is achieved by Hydrogen Power Working Group and funding is secured. | Proposal for NASA-wide hydrogen fueling stations, starting with GRC and KSC. Proposal sent to HQ. Sustainability funds now limited. \$24K may come from HQ at end of FY 2005. Stennis may receive money from Southern Fuel State Coalition. |
| 13. | Hydrogen power production at GRC (Sekura / Hoberecht / Prokopius) | Hydrogen is produced at GRC for a project, or a dispenser is working. | See above (#12). |
| 14. | Hydrogen powered fleet (Sekura / Hoberecht / Prokopius) | GRC has at least one working hydrogen car | See above (#12). |
| 15. | Sustainable cooling towers at GRC (Lallier / Myers) | Implement 1 tower – Eliminate disinfectant and/or minimize water use | Also, see short-term goals (#13). R. Lallier found another process to review. Write up to come. |
| 16. | Laser paint removal in Hangar (Sekura) | Make case for laser equipment at GRC | KSC got \$50,000 in funding for non-Shuttle applications. Telecon to discuss requirement begin in March. |
| 17. | Environmental management certification courses (Kocher/White) | Offer one course | Course is now in progress. Announcement for next course to be sent out in near future. |